



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,224	07/19/2001	Daozheng Lu	28049/34394C	1737

34431 7590 06/15/2006

HANLEY, FLIGHT & ZIMMERMAN, LLC  
20 N. WACKER DRIVE  
SUITE 4220  
CHICAGO, IL 60606

EXAMINER

SHEPARD, JUSTIN E

ART UNIT PAPER NUMBER

2623

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/909,224	LU ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Justin E. Shepard	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 13-21, 28-39, 61-69 and 79-103 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-21, 28-39, 61-69 and 79-103 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Objections***

Claim 15 is objected to because of the following informalities: The claim from which this claim depends now discloses a digital television system, which differs from the analog system disclosed in claim 15. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13, 14, 17, 18, 21, 28, 34, 37-39, 62-69, 80-87, and 89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aras in view of Ozkan.

Referring to claim 13, Aras discloses a television audience measurement system for digital television equipment, wherein the digital television equipment is disposed in a statistically selected location, the television audience measurement system comprising: software agent adapted to read (column 6, lines 2-6), from a data packet contained digital television programming (column 6, lines 55-57), a datum identifying-a television

Art Unit: 2623

program (column 7, lines 8-11), wherein the software agent is stored in memory associated with the digital television equipment (column 5, lines 45-50); an interface and communication apparatus adapted to transmit the identification datum to a remotely located central office (column 7, lines 23-27 and 32-33; Note: it would be obvious that the PID taught by Ozkan would read as a unique Audio-Visual Indicator as disclosed by Aras).

Aras does not disclose a system with a software agent adapted to read a program identification (PID) header from a data packet containing a portion of a tuned digital television program tuned by the digital television equipment; and wherein the PID header is broadcast with the data packet to enable the digital equipment to tune to a selected one of a plurality of minor channels broadcast in one major channel.

Ozkan discloses a system with a software agent adapted to read a program identification (PID) header from a data packet containing a portion of a tuned digital television program tuned by the digital television equipment (column 7, lines 47-54; column 5, lines 10-12; column 2, lines 49-50); and wherein the PID header is broadcast with the data packet to enable the digital equipment to tune to a selected one of a plurality of minor channels broadcast in one major channel (column 4, lines 32-34; column 7, lines 47-54).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use PIDs to tune to the minor digital channels, as taught by Ozkan, in the system disclosed by Aras. The motivation would have been that providing the television

Art Unit: 2623

digitally allows for 6 programs to be transmitted in one physical channel (Ozkan: column 4, lines 32-34).

Referring to claim 14, Aras discloses a television audience measurement system of claim 13 wherein the digital television equipment comprises a receiver having a tuner, a microprocessor, memory, an operating system, and a video display unit (column 26, lines 21-27); and

Referring to claim 17, Aras discloses a television audience measurement system of claim 13 wherein the digital television equipment comprises a set top box and a monitor (column 5, lines 45-50).

Referring to claim 18, Aras discloses a television audience measurement system of claim 13 wherein the digital television equipment comprises a personal computer provided with a television receiver (column 26, lines 21-27).

Referring to claim 21, Aras discloses a television audience measurement system of claim 13 further comprising a person identification apparatus (column 17, lines 32-39).

Referring to claim 28, Aras discloses a television audience measurement system of claim 13 wherein the software agent is arranged to detect window activities conducted by an audience (column 7, lines 18-21).

Referring to claim 34, Aras discloses a television audience measurement system of claim 13 wherein the interface and communication apparatus includes an intermediate data collector (column 7, lines 23-24).

Referring to claim 37, Aras discloses a television audience measurement system of claim 34 wherein the intermediate data collector is a data collection facility located in the central office (column 7, lines 23-27).

Referring to claim 38, Aras discloses a television audience measurement system of claim 13 wherein the software agent is a software agent downloaded to the memory associated with the digital television equipment (column 26, lines 37-40).

Referring to claim 39, Aras discloses a television audience measurement system claim 13 wherein the software agent a plug in software agent of the digital television equipment (column 26, line 35).

Referring to claim 62, Aras discloses an apparatus for identifying a viewer selected television program from among a plurality of time overlapped television programs broadcast in a viewer selected broadcast channel and received by digital television program reception equipment (column 5, lines 45-50), wherein the digital television program reception equipment has a data port to export tuned data (column

25, lines 7-10; column 7, lines 23-27), the apparatus comprising: reading means connected to the data port for reading program identifying data from among data provided on the data port (column 7, lines 8-11); and storing means for storing the program identifying data (column 7, lines 20-21).

Aras does not disclose an apparatus wherein the tuning is performed by digital television program reception equipment; and data is exported from the digital television program reception equipment.

Ozkan discloses an apparatus wherein the tuning is performed by digital television program reception equipment; and data is exported from the digital television program reception equipment (column 2, lines 49-50).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use transmit and tune to digital channels, as taught by Ozkan, in the system disclosed by Aras. The motivation would have been that providing the television digitally allows for 6 programs to be transmitted in one physical channel (Ozkan: column 4, lines 32-34).

Claim 80 is rejected on the same grounds as claim 62.

Referring to claim 63, Aras does not disclose an apparatus of claim 62 wherein the digital television program reception equipment is a digital converter.

Ozkan discloses an apparatus of claim 62 wherein the digital television program reception equipment is a digital converter (figure 1, parts 25 and 45).

At the time of the invention it would have been obvious for one of ordinary skill in the art to output the digital broadcast signal to digital or analog televisions. The motivation for this would be to have the widest user base possible.

Claim 81 is rejected on the same grounds as claim 63.

Referring to claim 64, Aras discloses an apparatus of claim 62 wherein the digital television program reception equipment is a personal computer (column 26, lines 21-27).

Claim 82 is rejected on the same grounds as claim 64.

Referring to claim 65, Aras discloses an apparatus of claim 62 wherein the digital television program reception equipment is a digital television set (column 5, lines 45-50).

Claim 83 is rejected on the same grounds as claim 65.

Referring to claim 66, Aras discloses an apparatus for identifying a viewer selected television program from among a plurality of time overlapped television programs broadcast a viewer selected broadcast channel and received by digital television program reception equipment (column 5, lines 45-50), wherein the digital television program reception equipment has data port to export tuned data (column 25, lines 7-10; column 7, lines 23-27), the apparatus comprising: reading means connected to the data port for reading program identifying data from among data provided on the



data port (column 7, lines 8-11); and, communicating means for communicating the program identifying data to a remote point (column 7, lines 23-37).

Aras does not disclose an apparatus wherein the tuning is performed by digital television program reception equipment; and data is exported from the digital television program reception equipment.

Ozkan discloses an apparatus wherein the tuning is performed by digital television program reception equipment; and data is exported from the digital television program reception equipment (column 2, lines 49-50).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use transmit and tune to digitals channels, as taught by Ozkan, in the system disclosed by Aras. The motivation would have been that providing the television digitally allows for 6 programs to be transmitted in one physical channel (Ozkan: column 4, lines 32-34).

Claim 84 is rejected on the same grounds as claim 66.

Referring to claim 67, Aras does not disclose an apparatus of claim 66 wherein the digital television program reception equipment is a digital converter.

Ozkan discloses an apparatus of claim 66 wherein the digital television program reception equipment is a digital converter (figure 2, parts 25 and 45).

At the time of the invention it would have been obvious for one of ordinary skill in the art to output the digital broadcast signal to digital or analog televisions. The motivation for this would be to have the widest user base possible.

Claim 85 is rejected on the same grounds as claim 67.

Referring to claim 68, Aras discloses an apparatus of claim 66 wherein the digital television program reception equipment is a personal computer (column 26, lines 21-27).

Claim 86 is rejected on the same grounds as claim 68.

Referring to claim 69, Aras discloses an apparatus of claim 66 wherein the digital television program reception equipment is a digital television set (column 5, lines 45-50).

Claim 87 is rejected on the same grounds as claim 69.

Referring to claim 89, Aras discloses a television audience measurement system of claim 13 wherein the interface and communication apparatus is an output port of the digital television equipment (figure 15, part 1557).

Claims 15, 16, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aras in view of Ozkan as applied to claim 13 above, and further in view of Lotspiech.

Referring to claims 15 and 16, Aras and Ozkan do not disclose a television audience measurement system of claim 13 wherein the digital television equipment is a set top box providing an analog television signal to an analog receiver; or a television

audience measurement system of claim 13 wherein the digital television equipment comprises a set top box providing a digital television signal to a digital receiver.

Lotspiech discloses a television audience measurement system of claim 13 wherein the digital television equipment is a set top box providing an analog television signal to an analog receiver; or a television audience measurement system of claim 13 wherein the digital television equipment comprises a set top box providing a digital television signal to a digital receiver (column 4, lines 55-57).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use a STB, as taught by Lotspiech, in the system disclosed by Aras and Ozkan. The motivation for this would be to enable the system to be used on older TVs.

Referring to claims 19 and 20, Aras and Ozkan do not disclose a television audience measurement system of claim 13 wherein the digital television equipment includes a VCR; or a television audience measurement system of claim 13 wherein the digital television equipment includes a digital versatile disk player.

Lotspiech discloses a television audience measurement system of claim 13 wherein the digital television equipment includes a VCR; or a television audience measurement system of claim 13 wherein the digital television equipment includes a digital versatile disk player (column 4, lines 55-57 and 59-60).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add a media player, taught by Lotspiech, to the system disclosed by Aras and Ozkan. The motivation would be to add more features to the device therefore making it more appealing to consumers.

Claims 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aras in view of Ozkan as applied to claim 13 above, and further in view of Ciciora.

Referring to claims 29 and 30, Aras and Ozkan do not disclose a television audience measurement system of claim 13 wherein the interface and communication apparatus includes a serial port, parallel port.

Ciciora discloses a television audience measurement system of claim 13 wherein the interface and communication apparatus includes a serial port, parallel port (column 4, lines 59-61).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add various I/O ports, taught by Ciciora, to the system disclosed by Aras and Ozkan. The motivation would have been to add functionality, while using well-known technologies to do so.

Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aras in view of Ozkan as applied to claim 13 above, and further in view of Williams.

Referring to claims 31 and 32, Aras and Ozkan do not disclose a television audience measurement system of claim 13 wherein the interface and communication apparatus includes an USB and firewire port.

Williams discloses a television audience measurement system of claim 13 wherein the interface and communication apparatus includes an USB and firewire port (column 6, lines 27-32).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add various I/O ports, taught by Williams, to the system disclosed by Aras and Ozkan. The motivation would have been to add functionality, while using well-known technologies to do so.

Claims 33, 35, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aras in view of Ozkan as applied to claims 13 and 34 above, and further in view of Ballard.

Referring to claim 33, Aras discloses a television system where a cable modem is used to send information upstream (column 17, lines 42-43).

Aras and Ozkan do not disclose a television audience measurement system of claim 13 wherein the interface and communication apparatus is arranged to send the identification datum to an Internet service provider via the Internet.

Ballard discloses a television audience measurement system of claim 13 wherein the interface and communication apparatus is arranged to send the identification datum to an Internet service provider via the Internet (column 4, lines 64-65; figure 2, parts 204 and 300).

At the time of the invention it would have been obvious for one of ordinary skill in the art to send the identification datum to an ISP via the Internet, taught by Ballard, in the system disclosed by Aras and Ozkan. The motivation for doing this would be that modems are commonly used as a communication device for a subscriber communicating with a cable company that is acting as an ISP.

Referring to claim 35, Aras discloses a television audience measurement system of claim 34 wherein the intermediate data collector includes a store and forward device (column 7, lines 23-27).

Aras and Ozkan do not disclose a system wherein the store and forward device is arranged to send the identification datum to the central office via a telephone line.

Ballard discloses a system wherein the store and forward device is arranged to send the identification datum to the central office via a telephone line (column 4, lines 64-65; figure 2, parts 204 and 300).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use a telephone to broadcast the information to the head end, taught by Ballard, in the system disclosed by Aras and Ozkan. The motivation for this would be because it is common to dump the data to a central computer over the phone line (Aras: column 2, lines 32-36).

Referring to claim 36, Aras discloses a television system where a cable modem is used to send information upstream (column 17, lines 42-43).

Aras and Ozkan do not disclose a television audience measurement system of claim 34 wherein the intermediate data collector is an Internet service provider.

Ballard discloses a television audience measurement system of claim 34 wherein the intermediate data collector is an Internet service provider (column 4, lines 64-65; figure 2, parts 204 and 300).

At the time of the invention it would have been obvious for one of ordinary skill in the art to send the identification datum to an ISP via the Internet, taught by Ballard, in the system disclosed by Aras and Ozkan. The motivation for doing this would be that a cable modem is commonly used as a communication device for a subscriber communicating with a cable company that is acting as an ISP.

Claims 61, 79, and 92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aras in view of Ozkan in further view of Shioda.

Referring to claim 79, Aras discloses a method implemented by a software agent stored in memory associated with digital television equipment, wherein the software agent is arranged to acquire television audience measurement data relative to the digital television equipment (column 5, lines 45-50), the method comprising: logging a television program identification datum identifying a television program selected for viewing on the digital television equipment (column 7, lines 8-11); logging an identification datum associated with data corresponding to the television program selected for viewing on the digital television equipment (Table II).

Aras does not disclose a system wherein a PID header from a data packet containing a portion of a tuned television program to identify the television program selected for viewing on the digital television equipment; or co-transmitted datum transmitted in a same major channel as the television program selected for viewing on the digital television equipment, the co-transmitted datum being related to the tuned television program.

Ozkan discloses a system wherein a PID header from a data packet containing a portion of a tuned television program to identify the television program selected for viewing on the digital television equipment (column 2, lines 49-50; column 7, lines 47-54); or co-transmitted datum transmitted in a same major channel as the television program selected for viewing on the digital television equipment, the co-transmitted datum being related to the tuned television program (column 4, lines 32-34).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use PIDs to tune to the minor digital channels, as taught by Ozkan, in the system disclosed by Aras. The motivation would have been that providing the television digitally allows for 6 programs to be transmitted in one physical channel (Ozkan: column 4, lines 32-34).

Aras and Ozkan do not disclose a system wherein Internet identification datum associated with an Internet task of the digital television equipment is transmitted to the headend.

Thrift discloses a system wherein Internet identification datum associated with an Internet task of the digital television equipment is transmitted to the headend (column 3, lines 35-40).

At the time of the invention it would have been obvious for one of ordinary skill in the art to log Internet usage and deliver it to the head-end. The motivation for this would have been because it is common practice for computers to log the internet usage, and therefore this data could be delivered to advertisers to better understand the habits of subscribers (column 7, lines 23-27).



Claim 61 is rejected on the same grounds as claim 79.

Referring to claim 92, Aras discloses a software agent of claim 61 wherein the digital television equipment includes an output port to export at least one of the time stamped PID header, the co-transmitted datum, or the Internet identification datum (figure 15, part 1557).

Claims 88, 91, 98, 100, and 102 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aras in view of Ozkan as applied to the claims above, and further in view of Lenihan.

Referring to claim 88, Aras discloses a television audience measurement system of claim 13 wherein the interface and communication apparatus transmits the PID headers to the remotely located central office to facilitate compilation of audience measurement data (column 7, lines 23-27).

Aras and Ozkan do not disclose a television audience measurement system of claim 13 wherein the software agent is structured to timestamp the PID headers.

Lenihan discloses a television audience measurement system of claim 13 wherein the software agent is structured to timestamp the PID headers (column 7, lines 15-17 and 34-38).

At the time of the invention it would have been obvious of one of ordinary skill in the art to use the time stamping method taught by Lenihan in the system disclosed by

Aras and Ozkan. The motivation would have been to enable the headend to identify programs by the time they arrived at the set top box.

Claims 91, 98, 100, and 102 are rejected on the same grounds as claim 88.

Claims 90, 93, 95, 97, 99, 101, and 103 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aras in view of Ozkan as applied to the claims above, and further in view of Saito.

Referring to claim 90, Aras and Ozkan do not disclose a television audience measurement system of claim 89 wherein the output port outputs data in accordance with the IEEE 1394 protocol.

Saito discloses a television audience measurement system of claim 89 wherein the output port outputs data in accordance with the IEEE 1394 protocol (figure 58, lines 7003 and 7005).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the firewire protocol to communicate upstream, as taught by Saito, in the system disclosed by Aras and Ozkan. The motivation would have been to enable multiple units to connect up to a single modem for upstream communication.

Claims 93, 95, 97, 101, and 103 are rejected on the same grounds as claim 90.

Claim 99 is rejected on the same grounds as claims 92 and 93.

Claims 94 and 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aras in view of Ozkan as applied to the claims above, and further in view of Nam.

Referring to claim 94, Aras and Ozkan does not disclose an apparatus of claim 62 wherein the reading means time stamps the program identifying data.

Nam discloses an apparatus of claim 62 wherein the reading means time stamps the program identifying data (column 12, lines 21-26).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the time stamp reading taught by Nam in the system disclosed by Aras and Ozkan. The motivation would have been to sync the STB to video feed.

Claim 96 is rejected on the same grounds as claim 94.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin E. Shepard whose telephone number is (571) 272-5967. The examiner can normally be reached on 7:30-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JS

  
**CHRISTOPHER GRANT**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**